EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	HFB1 or HFBII	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L2	16	(HFB1 or HFBII) and (foaming or foam)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L3	8	(HFB1 or HFBII) same (foaming or foam)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L4	186	hydrophobin	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L5	16	hydrophobin same (foam or foaming)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L6	66	hydrophobin and trichoderma	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L7	12	hydrophobin same fermentation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR .	ON	2007/09/10 15:33
L8	31	hydrophobin and fermentation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L9	27	hydrophobin same trichoderma	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:33
L10	15	hydrophobin and trichoderma and foam\$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR .	ON	2007/09/10 15:33
L11	16	hydrophobin and trichoderma and fermentation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34

EAST Search History

L12 .	456	fungal with host with production	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L13	71	fungal with host with production and hydrophobic with proteins	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L14	71	fungal with host with production and hydrophobic with proteins	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L15	71	fungal with host with production and hydrophobic with proteins	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L16	71	fungal with host with production and hydrophobic with proteins and polypeptides	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L17	43	fungal with host with production and hydrophobic with protein and fermentation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L18	0	fungal with host with production and hydrophobic with protein same fermentation	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:34
L19	9437	trichoderma	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:35
L20	876	trichoderma and foam	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:35
L21	10	trichoderma same foam	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:35
L22	0	(trichoderma same foam).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/10 15:36
L23	. 3	trichoderma same foam and HFBI	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	·ON	2007/09/10 15:36



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Search	Most Recent Queries	Time	Result
<u>#14</u>	Search trichoderma reesei hfb1 gene mutation	16:03:33	<u>1</u>
#13	Search trichoderma reesei hfb1 gene	16:03:26	<u>5</u>
<u>#12</u>	Search trichoderma reesei hfb1	16:03:03	<u>5</u>
<u>#11</u>	Search trichoderma reesei hfb1 mutants	16:02:51	<u>0</u>
<u>#10</u>	Search trichoderma reesei gene modification	16:01:04	4
<u>#9</u>	Search trichoderma reesei gene modification	16:00:54	<u>0</u>
<u>#8</u>	Search trichoderma reesei cell culture	16:00:38	7
<u>#7</u>	Search trichoderma reesei cell cuture	16:00:35	<u>0</u>
<u>#6</u>	Search trichoderma reesei foam	16:00:19	<u>6</u>
<u>#3</u>	Search trichoderma reesei hfbi	15:58:28	<u>21</u>
<u>#2</u>	Search trichoderma reesei	15:57:59	<u>883</u>
<u>#1</u>	Search trichoderma reesi	15:57:55	<u>2</u>

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- => trichoderma with reesei and hfb1
 - 2 FILE AGRICOLA
 - 5 FILE BIOSIS
 - 2 FILE BIOTECHABS
 - 2 FILE BIOTECHDS
 - 9 FILE CAPLUS
 - 22 FILES SEARCHED...
 - 22 FILE DGENE
 - 2 FILE DISSABS
 - 38 FILES SEARCHED...
 - 5 FILE LIFESCI
 - 47 FILES SEARCHED...
 - 7 FILE USPATFULL
 - 1 FILE USPAT2
 - 68 FILES SEARCHED...
 - 10 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX
- L5 QUE TRICHODERMA WITH REESEI AND HFB1

=> d	rank		
F1		22	DGENE
F2		9	CAPLUS
F3		7	USPATFULL
F4	*	5	BIOSIS
F5		5	LIFESCI
F6		2	AGRICOLA
F7		2	BIOTECHABS
F8		2	BIOTECHDS
F9	."	2	DISSABS
F10		1	USPAT2

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L7 12 DUP REMOVE L6 (11 DUPLICATES REMOVED)

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- L7 ANSWER 1 OF 12 DISSABS COPYRIGHT (C) 2007 ProQuest Information and Learning Company; All Rights Reserved on STN
- TI Characterization of the Trichoderma reesei hydrophobins HFBI and HFBII
- L7 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Characterization of the Trichoderma reesei hydrophobins HFBI and HFBII
- L7 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
- TI The Trichoderma reesei hydrophobin genes hfb1 and hfb2 have diverse functions in fungal development
- L7 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Improved method for heterologous production of secreted proteins in fungi based on transcription enhancement of secreted protein genes by modified promoter
- L7 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
- TI Process technological effects of deletion and amplification of hydrophobins I and II in transformants of Trichoderma reesei
- L7 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
- TI A method for decreasing the foam formation during cultivation of a microorganism
- L7 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3
- TI Overproduction, purification, and characterization of the Trichoderma reesei hydrophobin HFBI
- L7 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4
- TI Differential expression of the vegetative and spore-bound hydrophobins of Trichoderma reesei. Cloning and characterization of the hfb2 gene
- L7 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 5

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Genetic and biochemical characterization of the Trichoderma
TI
    reesei hydrophobin HFBI
    ANSWER 10 OF 12 DISSABS COPYRIGHT (C) 2007 ProQuest Information and
L7
    Learning Company; All Rights Reserved on STN
    HIGHLY EXPRESSED TRICHODERMA REESEI GENES: CLONING,
ΤI
     CHARACTERIZATION AND USE IN PROTEIN PRODUCTION ON GLUCOSE-CONTAINING MEDIA
    ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
1.7
    Highly expressed Trichoderma reesei genes. Cloning,
ΤI
     characterization and use in protein production on glucose-containing media
     ANSWER 12 OF 12 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
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=> d ab bid l3, 12, 9, 8, 7, 6, 5, 4, 3, 2, 1
2 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
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ALL ----- BIB, AB, IND, RE
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DALL ----- ALL, delimited (end of each field identified)
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FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
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MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
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SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS
IABS ----- ABS, indented with text labels
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IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
OBIB ----- AN, plus Bibliographic Data (original)
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SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations
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HITSTR ----- HIT RN, its text modification, its CA index name, and
its structure diagram

HITSEQ ----- HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields

FHITSTR ---- First HIT RN, its text modification, its CA index name, and
its structure diagram

FHITSEQ ----- First HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields

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L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

AN 2007:661850 CAPLUS

DN 147:183355

TI Surface Properties of Class II Hydrophobins from Trichoderma reesei and Influence on Bubble Stability

AU Cox, Andrew R.; Cagnol, Florence; Russell, Andrew B.; Izzard, Martin J.

CS Unilever R&D Colworth, Bedfordshire, MK44 1LQ, UK

SO Langmuir (2007), 23(15), 7995-8002 CODEN: LANGD5; ISSN: 0743-7463

PB American Chemical Society

DT Journal

LA English

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> trichoderma with reesei and hfb1 L9 23 TRICHODERMA WITH REESEI AND HFB1

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ENTER L# LIST OR (END):19
PROCESSING COMPLETED FOR L9
L10 12 DUP REMOVE L9 (11 DUPLICATES REMOVED)

=> d ab bid 12, 9, 8, 7, 6, 5, 4, 3, 2, 1 'BID' IS NOT A VALID FORMAT

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L10 ANSWER 12 OF 12 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

AN 1996:268160 BIOSIS

DN PREV199698824289

TI Highly expressed Trichoderma reesei genes: Cloning,

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characterization and use in protein production of glucose-containing
     Nakari-Setala, Tiina
AU
     VTT Biotechnol. and Food Res., Biologinkuja 1, P.O. Box 1503, FIN-02044
CS
     VTT, Finland
     VTT Publications, (1995) Vol. 0, No. 254, pp. 1-94.
SO
     ISSN: 1235-0621.
DT
     Article
     English
LA
     Entered STN: 10 Jun 1996
ÉD
     Last Updated on STN: 10 Jun 1996
     ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 5
     1996:83228 CAPLUS
AN
DN
     124:253667
     Genetic and biochemical characterization of the Trichoderma
ΤI
     reesei hydrophobin HFBI
     Nakari-Setala, Tiina; Aro, Nina; Kalkkinen, Nisse; Alatalo, Edward;
ΑU
     Penttila, Merja
     VTT Biotechnology and Food Res., FIN-02044, Finland
CS
     European Journal of Biochemistry (1996), 235(1/2), 248-55
SO
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     English
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     1997:622375 CAPLUS
AN
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     127:303857
     Differential expression of the vegetative and spore-bound hydrophobins of
TI
     Trichoderma reesei. Cloning and characterization of the
     hfb2 gene
     Nakari-Setala, Tiina; Aro, Nina; Ilmen, Marja; Munoz, Gaston; Kalkkinen,
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     Nisse; Penttila, Merja
     VTT Biotechnology and Food Research, VTT, FIN-02044, Finland
CS
     European Journal of Biochemistry (1997), 248(2), 415-423
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     Springer
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LA
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     ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3
     2001:800499 CAPLUS
AN
     136:66859
DN
     Overproduction, purification, and characterization of the
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     Askolin, S.; Nakari-Setala, T.; Tenkanen, M.
ΑU
     VTT Biotechnology, 02044, Finland
CS
     Applied Microbiology and Biotechnology (2001), 57(1-2), 124-130
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     CODEN: AMBIDG; ISSN: 0175-7598
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     2001:152808 CAPLUS
AN
     134:206662
DN
     A method for decreasing the foam formation during cultivation of a
TI
     Nakari-Setaelae, Tiina; Penttilae, Merja; Bailey, Michael; Tenkanen, Maija
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IN

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Valtion Teknillinen Tutkimuskeskus, Finland
PA
     PCT Int. Appl., 65 pp.
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LA
     English
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     ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
     2002:414973 CAPLUS
AN
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     137:124250
     Process technological effects of deletion and amplification of
ΤI
     hydrophobins I and II in transformants of Trichoderma
     Bailey, M. J.; Askolin, S.; Horhammer, N.; Tenkanen, M.; Linder, M.;
ΑU
     Penttila, M.; Nakari-Setala, T.
     VTT Biotechnology, VTT, 02044, Finland
CS
     Applied Microbiology and Biotechnology (2002), 58(6), 721-727
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     CODEN: AMBIDG; ISSN: 0175-7598
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     2002:637705 CAPLUS
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     Improved method for heterologous production of secreted proteins in fungi
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     based on transcription enhancement of secreted protein genes by modified
     Pakula, Tiina; Saloheimo, Markku; Uusitalo, Jaana; Huuskonen, Anne;
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     Watson, Adrian; Jeenes, David; Archer, David; Penttilae, Merja
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     PCT Int. Appl., 84 pp.
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LA
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    ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
AN
     2005:1254134 CAPLUS
DN
     144:208676
     The Trichoderma reesei hydrophobin genes hfb1
     and hfb2 have diverse functions in fungal development
     Askolin, Sanna; Penttilae, Merja; Woesten, Han A. B.; Nakari-Setaelae,
ΑU
     Tiina
     VTT Biotechnology, FI-02044, Finland
CS
SO
     FEMS Microbiology Letters (2005), 253(2), 281-288
     CODEN: FMLED7; ISSN: 0378-1097
PΒ
     Elsevier B.V.
DT
     Journal
    English
LA
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     2006:1232220 CAPLUS
DN
     146:40624
ΤI
    Characterization of the Trichoderma reesei
    hydrophobins HFBI and HFBII
IIA
    Askolin, Sanna
    VTT Biotechnology, Finland
CS
    VTT Publications (2006), 601, 1-99
   CODEN: VTTPEY; ISSN: 1235-0621
    Valtion Teknillinen Tutkimuskeskus
PB
DT
     Journal
    English
LA
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                         Order Number: AAIC826188 (not available for sale by
     Characterization of the Trichoderma reesei
TI
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hydrophobins HFBI and HFBII

- AU Askolin, Sanna Marika [D.Sc.]
- CS Teknillinen Korkeakoulu (Helsinki) (Finland) (5766)
- Dissertation Abstracts International, (2006) Vol. 67, No. 4C, p. 1084. Order No.: AAIC826188 (not available for sale by UMI). VTT Technical Research Centre of Finland, Tietotie 2, PO Box 1000, FI-02044 VTT, Finland. 137 pages.
- DT Dissertation
- FS DAI
- LA English
- ED Entered STN: 20070402 Last Updated on STN: 20070402

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- L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
 TI Surface Properties of Class II Hydrophobins from Trichoderma
 reesei and Influence on Bubble Stability
- L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
 TI Process technological effects of deletion and amplification of
 hydrophobins I and II in transformants of Trichoderma reesei

=> d ab bib 13

ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

We report the remarkable surface behavior of class II hydrophobin proteins HFBI and HFBII from Trichoderma reesei and the resulting effect that these proteins have on the stability of air bubbles to the process of disproportionation. The surface properties were studied using surface tensiometry and surface shear rheol. Surface tensiometry data show that hydrophobins are very surface active proteins, reducing the surface tension to approx. 30 mN m-1. The rate at which the hydrophobins adsorb at the surface may also be related to the self-assembly behavior in aqueous solution. We further show that hydrophobins form air/water surfaces.

with high elasticity, the magnitude of which is well in excess of that of

surface layers formed by other common proteins used as foam or emulsion stabilizers. The measured surface properties translate to the stability of bubbles with adsorbed hydrophobin, and in this study, we demonstrate the ability of hydrophobin to have a dramatic effect on the rate of disproportionation in some simple bubble dissoln. studies.

AN 2007:661850 CAPLUS

DN 147:183355

- TI Surface Properties of Class II Hydrophobins from Trichoderma reesei and Influence on Bubble Stability
- AU Cox, Andrew R.; Cagnol, Florence; Russell, Andrew B.; Izzard, Martin J.

CS Unilever R&D Colworth, Bedfordshire, MK44 1LQ, UK

- SO Langmuir (2007), 23(15), 7995-8002 CODEN: LANGD5; ISSN: 0743-7463
- PB American Chemical Society
- DT Journal
- LA English
- RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ab bib 13 2

- L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
- Transformants of the Trichoderma reesei strains QM9414 and AB Rut-C30 were constructed in which the genes for the two major hydrophobin proteins, hydrophobins I (HFBI) and II (HFBII), were deleted or amplified by mol. biol. techniques. Growth parameters and foam production of the transformant strains were compared with the corresponding properties of the parent strains by cultivation in laboratory bioreactors under conditions of catabolite repression (glucose medium) or induction of cellulolytic enzymes and other secondary metabolites (cellulose and lactose media). All the transformed strains exhibited vegetative growth properties similar to those of their parent. The Ahfb2 (but not the Ahfb1) transformant showed reduced tendency to foam, whereas both strains overproducing hydrophobins foamed extensively, particularly in the case of HFBII. Enzyme production on cellulose medium was unaltered in the $\Delta hfb2$ transformant VTT D-99676, but both the Ahfb2 and HFBII-overproducing transformants exhibited somewhat decreased enzyme production properties on lactose medium. Production of HFBI by the multi-copy transformant VTT D-98692 was almost 3-fold that of the parent strain QM9414. Overprodn. of HFBII by the transformant VTT D-99745, obtained by transformation with three addnl. copies of the hfb2 gene under the cbh1 promoter, was over 5-fold compared to production by the parent strain Rut-C30. The Δhfb2 transformant VTT D-99676 produced a greatly increased number of spores on lactose medium compared with the parent strain, whereas the HFBII-overproducing transformant VTT D-99745 produced fewer spores.
- AN 2002:414973 CAPLUS
- DN 137:124250
- TI Process technological effects of deletion and amplification of hydrophobins I and II in transformants of Trichoderma reesei
- AU Bailey, M. J.; Askolin, S.; Horhammer, N.; Tenkanen, M.; Linder, M.; Penttila, M.; Nakari-Setala, T.
- CS VTT Biotechnology, VTT, 02044, Finland
- SO Applied Microbiology and Biotechnology (2002), 58(6), 721-727 CODEN: AMBIDG; ISSN: 0175-7598
- PB Springer-Verlag
- DT Journal
- LA English
- RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT